

IN THE CLAIMS:

1-38. (Canceled)

39. (Previously presented) A catheter for ablation and/or mapping of tissue, comprising:

an elongated catheter body having a proximal section and a distal section, the distal section including a distal segment, a curvable proximal segment, and a bendable intermediate segment positioned between the distal segment and the proximal segment, the intermediate segment coupled with the distal segment at a first junction and with the proximal segment at a second junction;

a first deflection member deflecting the distal segment through the intermediate segment, the first deflection member extending from the proximal section of the catheter body to the first junction; and

a second deflection member deflecting the proximal segment, the second deflection member extending from the proximal section of the catheter body to the second junction along a first axis, wherein the first deflection member extends through the proximal section of the catheter body along the first axis.

40. (Previously presented) The catheter of claim 39, wherein the first deflection member deflects the distal segment between a first position wherein the distal segment and the proximal segment are axially aligned with the catheter body, and a second position wherein the distal segment and the proximal segment are in substantially parallel alignment.

41. (Previously presented) The catheter of claim 39, wherein the first deflection member advances the intermediated section in a bending radius between approximately 2.0 mm and 7.0 mm.

42. (Previously presented) The catheter of claim 39, further comprising a third deflection member rotating the distal section along the second junction.

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43. (Previously presented) The catheter of claim 39, wherein the deflection of the first deflection member is independent of the deflection of the second deflection member.

44. (Previously presented) The catheter of claim 40, wherein a catheter body axis extends centrally through the catheter body from the proximal section to the distal section, and the first deflection member deflects the distal segment from the first position through a first angle relative to the catheter body axis while the proximal segment remains axially aligned with the catheter body axis.

45. (Previously presented) The catheter of claim 40, wherein a catheter body axis extends centrally through the catheter body from the proximal section to the distal section, and the first deflection member deflects the distal segment through a first angle relative to the catheter body axis and the second deflection member deflects the proximal segment through a second angle relative to the catheter body axis, and wherein the first angle is between approximately zero and 180 degrees and the second angle is between approximately minus 90 degrees and 270 degrees relative to the catheter body axis.

46. (Previously presented) The catheter of claim 39, wherein a catheter body axis extends centrally through the catheter body from the proximal section to the distal section, and wherein the distal section of the catheter body is deflected at a first angle relative to the catheter body axis through deflection of one of both the first deflection member and the second deflection member and only the second deflection member.

47. (Previously presented) The catheter of claim 39, wherein a catheter body axis extends centrally through the catheter body from the proximal section to the distal section, and wherein the second deflection member advances the distal segment through a first angle relative to the catheter body axis to position the

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distal segment along a first side of the catheter body axis, and both the first deflection member and the second deflection member advance the distal segment through the first angle to position the distal segment along a second side of the catheter body axis opposite the first side.

48. (Previously presented) The catheter of claim 39, wherein the proximal segment is coupled to the proximal section at a third junction, and further comprising:

a first incompressible member formed about the first deflection member from the proximal section of the catheter body through the proximal segment and terminating at the second junction; and

a second incompressible member formed about the second deflection member from the proximal section of the catheter body to the third junction, wherein the first incompressible member is fixedly engaged at the second junction and free floating within the proximal section of the catheter body.

49. (Previously presented) The catheter of claim 39, wherein a catheter body axis extends centrally through the catheter body from the proximal section to the distal section, and wherein the second deflection member is offset a first distance from the catheter body axis, and the first deflection member is offset a second distance, less than the first distance, from the catheter body axis between the proximal section of the catheter body and the second junction and is offset the first distance between the first junction and the second junction.

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50. (Previously presented) A catheter for ablation and/or mapping of tissue, comprising:

an elongated catheter body having a proximal section and a distal section, the distal section including a distal segment, a curvable proximal segment, and a bendable intermediate segment positioned between the distal segment and the proximal segment, the intermediate segment coupled with the distal segment at a first junction and with the proximal segment at a second junction, and the proximal segment coupled to the proximal section at a third junction;

a first deflection member deflecting the distal segment through the intermediate segment, the first deflection member extending from the proximal section of the catheter body to the first junction;

a second deflection member deflecting the proximal segment, the second deflection member extending from the proximal section of the catheter body to the second junction;

a first incompressible member formed about the first deflection member from the proximal section of the catheter body through the proximal segment and terminating at the second junction, the first incompressible member fixedly engaged at the second junction and free floating within the proximal section of the catheter body; and

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a second incompressible member formed about the second deflection member from the proximal section of the catheter body to the third junction, wherein a catheter body axis extends centrally through the catheter body from the proximal section to the distal section, the second deflection member being offset a first distance from the catheter body axis, and the first deflection member being offset a second distance, less than the first distance, from the catheter body axis between the proximal section of the catheter body and the second junction and offset the first distance between the first junction and the second junction, and wherein the first deflection member deflects the distal segment between a first position wherein the distal segment and the proximal segment are axially aligned with the catheter body, and a second position wherein the distal segment and the proximal segment are in substantially parallel alignment.

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51. (Previously presented) The catheter of claim 50, further comprising a third deflection member rotating the distal section along the second junction.

52. (Previously presented) The catheter of claim 50, wherein the deflection of the first deflection member is independent of the deflection of the second deflection member.

53. (Previously presented) The catheter of claim 52, wherein the first deflection member deflects the distal segment from the first position through a first angle relative to the catheter body axis while the proximal segment remains axially aligned with the catheter body axis.

54. (Previously presented) The catheter of claim 53, wherein the first deflection member deflects the distal segment through a first angle relative to the catheter body axis and the second deflection member deflects the proximal segment through a second angle relative to the catheter body axis, and wherein the first angle is between approximately zero and 180 degrees and the second angle is between approximately minus 90 degrees and 270 degrees relative to the catheter body axis.

55. (Previously presented) The catheter of claim 52, wherein the distal section of the catheter body is deflected at a first angle relative to the catheter body axis through deflection of one of both the first deflection member and the second deflection member and only the second deflection member.

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56. (Previously presented) The catheter of claim 52, wherein the second deflection member advances the distal segment through a first angle relative to the catheter body axis to position the distal segment along a first side of the catheter body axis, and both the first deflection member and the second deflection member advance the distal segment through the first angle to position the distal segment along a second side of the catheter body axis opposite the first side.

57. (New) A catheter for mapping and/or ablation of tissue, comprising:  
an elongated catheter body including a proximal section and a distal section,  
the distal section including a curvable proximal segment, a bendable  
intermediate segment and a distal segment;  
a proximal insulator facilitating a junction between a portion of the proximal  
segment of the distal section and a portion of the intermediate segment of  
the distal section;  
a distal insulator facilitating a junction between another portion of the  
intermediate segment of the distal section and a portion of the distal  
segment of the distal section;  
a first deflection member adapted to deflect the distal segment through the  
proximal segment, extending through the proximal section and the distal  
section and including a distal portion coupled to the distal insulator; and  
a second deflection member adapted to deflect the proximal segment,  
extending through the proximal section and the distal section and  
including a distal portion coupled to the proximal insulator.

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58. (New) The catheter of claim 57, wherein:

the proximal segment of the distal section includes a first multi-lumen tube,  
the first tube including a first lumen through which the first deflection  
member passes and a second lumen through which the second deflection  
member passes;

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the intermediate segment of the distal section includes a second multi-lumen tube, the second tube including a lumen through which the first deflection member passes; and

the second multi-lumen tube has a durometer which is relatively soft compared to the first multi-lumen tube.

59. (New) The catheter of claim 57, wherein the first deflection member and the second deflection member each further include a lubricious coating formed thereover.

60. (New) The catheter of claim 57, wherein the first deflection member advances the intermediated section in a bending radius between approximately 2.0 mm and 7.0 mm.

61. (New) The catheter of claim 57, wherein the deflection of the first deflection member is independent of the deflection of the second deflection member.

62. (New) The catheter of claim 57, wherein a catheter body axis extends centrally through the catheter body from the proximal section to the distal section, and the first deflection member deflects the distal segment through a first angle relative to the catheter body axis and the second deflection member deflects the proximal segment through a second angle relative to the catheter body axis, and wherein the first angle is between approximately zero and 180 degrees and the second angle is between approximately minus 90 degrees and 270 degrees relative to the catheter body axis.

63. (New) The catheter of claim 57, further comprising an incompressible spiral wire tube formed about the first deflection member and extending through the proximal section and the distal section; wherein a distal end of the incompressible tube is fixedly engaged to the proximal insulator and a proximal end of the tube freely floats within the proximal section of the catheter body.

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64. (New) The catheter of claim 57, wherein the first deflection member further includes an enlarged ball tip terminating the distal portion and the ball tip fits in a bore of the distal insulator.

65. (New) The catheter of claim 57, wherein the distal portion of the second deflection member includes a bent portion formed over a distal surface of the proximal insulator.

66. (New) The catheter of claim 57, further comprising a third deflection member adapted to rotate the distal section, extending through the proximal section and the distal section and including a distal portion coupled to the proximal insulator.

67. (New) A catheter for mapping and/or ablation of tissue, comprising:  
an elongated catheter body including a proximal section and a distal section,  
the distal section including a bendable first segment and an extended  
distal segment, the extended distal segment including an insulating tubular  
member and a one or more electrodes supported thereon;  
a distal insulator facilitating a junction between a distal end of the first  
segment and a proximal end of the extended distal segment; and  
a deflection member adapted to deflect the first segment, extending through  
the proximal section and the distal section and including a distal end  
coupled to the distal insulator;  
wherein the insulating tubular member of the extended distal segment has a  
relatively low durometer such that the extended distal segment is more  
flexible than the proximal section.

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